

U.S. Serial No. 10/667,545  
Response to Office Action  
Mailed November 16, 2004

Page 2 of 6

**AMENDMENTS TO THE CLAIMS:**

Claims 1, 11 and 17 have been amended herein. Claims 5, 14, 15 and 19 have been cancelled.

The listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF THE CLAIMS**

1. (Currently amended) A lamp inverter starting circuit comprising:  
a switching portion that converts a bus voltage signal into an alternating current signal;  
an input portion that receives the bus voltage signal, wherein the bus voltage signal ranges up to 390V;  
a resonant load portion for receiving a lamp load; and  
a voltage controlled start-up portion that delays triggering of the inverter starting circuit based on the input bus voltage signal, ~~a detected voltage~~.
2. (Original) The lamp inverter starting circuit as set forth in claim 1, wherein the switching portion includes first and second power transistors.
3. (Original) The lamp inverter starting circuit as set forth in claim 2, wherein the transistors are one of bipolar junction transistors and field effect transistors.
4. (Original) The lamp inverter starting circuit as set forth in claim 1, further including:  
an input AC line voltage source ranging from 120 V to 280 V.
5. (Cancelled)
6. (Original) The lamp inverter starting circuit as set forth in claim 1, wherein the start-up portion includes at least one charging capacitor that collects charge prior to triggering of the inverter starting circuit.

U.S. Serial No. 10/667,545  
 Response to Office Action  
 Mailed November 16, 2004

Page 3 of 6

7. (Original) The lamp inverter starting circuit as set forth in claim 6, wherein the at least one charging capacitor charges to a threshold voltage.

8. (Original) The lamp inverter starting circuit as set forth in claim 7, wherein the startup portion includes at least one diac that has a breakdown voltage that determines the threshold voltage.

9. (Original) The lamp inverter starting circuit as set forth in claim 8, wherein the at least one charging capacitor charges to the breakdown voltage prior to triggering the inverter starting circuit.

10. (Original) The lamp inverter starting circuit as set forth in claim 7, wherein the threshold voltage is 390 V.

11. (Currently amended) A method of firing a lamp comprising:  
 supplying an AC line voltage;  
 converting the AC line voltage into a DC bus voltage;  
 charging a capacitor with current supplied by the bus voltage;  
 overcoming a breakdown voltage of a diac by ramping the bus voltage up to between about 300V to about 500V, turning the diac conductive when the charged capacitor reaches the diac breakdown voltage; and[[.]]  
 supplying voltage to the lamp after the diac turns conductive.

12. (Original) The method as set forth in claim 11, wherein the step of overcoming the breakdown voltage includes discharging the capacitor.

13. (Original) The method as set forth in claim 11, wherein the step of supplying the AC line voltage includes electrically connecting the lamp to an AC voltage source, the voltage source ranging from 120 V to 280 V.

14. (Cancelled)

15. (Cancelled)

U.S. Serial No. 10/667,545  
Response to Office Action  
Mailed November 16, 2004

Page 4 of 6

16. (Original) The method as set forth in claim 11, wherein the step of supplying voltage to the lamp occurs before the bus voltage reaches a steady state.

17. (Currently amended) A lamp inverter circuit comprising:  
a switching portion that includes first and second transistors;  
a resonant load portion for receiving a lamp;  
a power factor correction circuit that delivers a bus voltage that ranges from about 120V to about 300V;  
a voltage dependant start-up portion that delays firing of the inverter until the bus voltage ramps up to a pre-determined threshold.

18. (Original) The lamp inverter circuit as set forth in claim 17 further including:  
an AC line voltage that ranges from 120 V to 280 V .

19. (Cancelled)

20. (Original) The lamp inverter circuit as set forth in claim 17, wherein the voltage dependent start-up portion allows firing of the inverter circuit before the bus voltage reaches a steady state.